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Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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|---|------------------------|--------------------------|--|
| ADEM | Application Number | 10/646,541 | |
| TRANSMITTAL | Filing Date | August 21, 2003 | |
| FORM | First Named Inventor | Bernard A. GALLER et al. | |
| (to be used for all correspondence after initial filing | Art Unit | 2643 | |
| | Examiner Name | Unknown | |
| Number of Pages in This Submission | Attorney Docket Number | 5926-000003 | |

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| ENCLOSURES (check all that apply) | | | | | |
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| Fee Transmittal F | - form | Drawing(s) | , | After Allowance Communication to Technology Center (TC) | |
| Fee Attached | I | Licensing-re | elated Papers | Appeal Communication to Board of Appeals and Interferences | |
| Amendment / Rep | ply | Petition | | Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) | |
| After Final | | | Convert to a Application | Proprietary Information | |
| Affidavits/dec | elaration(s) | | ttorney, Revocation Correspondence Address | Status Letter | |
| Extension of Time | e Request | Terminal Di | isclaimer | Other Enclosure(s) (please identify below): | |
| Express Abandor | nment Request | Request for Refund CD, Number of CD(s) | | Rejurn postcard; HDP Form- 1919; Copies of 10 cited articles | |
| ☐ 35, Raini | | | · · · —— | y | |
| Certified Copy of Document(s) | Priority | Remarks | fees that may be requi | nereby authorized to charge any additional red under 37 CFR 1.16 or 1.17 to Deposit A duplicate copy of this sheet is enclosed. | |
| Response to Miss Incomplete Applic | | | | , various supplies and shock is choosed. | |
| Response to Parts under 3 1.52 or 1.53 | • | | | | |
| | SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | | |
| Firm <i>or</i> Individual name | Harness, Dickey & | Attorney Name Reg. No. 28,764 | | _ | |
| Signature | Signature Tree Stolik | | | | |
| Date | Date July 26, 2005 | | | | |
| CERTIFICATE OF TRANSMISSION/MAILING | | | | | |

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

| Typed or printed name | Stephanie J. Rutkowski | Express Mail Label No. | EV 570 164 676 US (7/26/2005) |
|-----------------------|------------------------|---------------------------|-------------------------------|
| Signature | Ateshane J. Kutkowski | Date | July 26, 2005 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PAPPHication No.:

10/646,541

Filing Date:

August 21, 2003

Applicant:

Bernard A. GALLER, et al.

Group Art Unit:

2643

Examiner:

Unknown

Title:

DIGITAL HEARING AID BATTERY CONSERVATION SYSTEM

Attorney Docket:

5926-000003

Director of the United States Patent and Trademark Office

P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. <u>LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION</u>

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

Serial No. 10/646,541

| | B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120: | | |
|------|---|--|--|
| | U.S. Serial Number U.S. Filing Date | | |
| | C. This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).) | | |
| III. | CONCISE EXPLANATION OF THE RELEVANCE (check at least one box) | | |
| | A. Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required). | | |
| | B. A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)): | | |
| | 1. See the attached foreign patent office communication from a counterpart foreign application: | | |
| | 2. English translations are provided: | | |
| | 3. Other: | | |
| | C. The following additional information is provided for the Examiner's consideration. | | |
| | | | |

| IV. | CROSS REFERENCE | TO RELATED APPLICA | <u>.TION(S)</u> |
|-----|---|---|--|
| | contain(s) subject ma bringing this(these) a | atter that may be related | llowing co-pending application(s) to the present application. By iner's attention, Applicant(s) does U.S.C. § 122. |
| | <u>Serial No.</u> | Filing Date | Art Unit |
| ٧. | THIS IDS IS BEING F | ILED UNDER | |
| | A. 🖂 37 C.F.R. § 1.97 | 7(b): (check <u>only</u> one box |) |
| | than a continu | | ate of a national application other on under § 1.53(d) (37 C.F.R. § uired. |
| | | in an international applic | entry of the national stage as set ation (37 C.F.R. § 1.97(b)(2)). No |
| | 1.97(b)(3)). N Office Action of under 37 C.F. 1.97(e) below; | o fee or certification is ron on the merits has been R. § 1.97(c) and see th or, if no certification has | Action on the merits (37 C.F.R. § equired. In the event that a first issued, please consider this IDS e certification under 37 C.F.R. § been made, charge our deposit as required by 37 C.F.R. § 1.17(p) |
| | | | Action after the filing of a request R. § 1.114. No fee or certification |
| | В. 37 С.F.R. § 1.9 7 | 7(c): (check <u>only</u> one box) | |
| | | e of Allowance under 37 | al Office Action under 37 C.F.R. § C.F.R. § 1.311, or an action that |
| | 1. ☐ No certific by 37 C.F.R. § | • | the amount of \$180.00 is required |
| | 2 ☐ See the c | certification below. No fee | is required |

| | C. 37 C.F.R. § 1.97(d): |
|------|---|
| | after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee. |
| | 1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p). |
| VI. | CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box) |
| | The undersigned hereby certifies that: |
| | A. \square each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII if applicable; or |
| | B. \boxtimes no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)). |
| | C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS. |
| VII. | STATEMENT UNDER 37 C.F.R. 1.704(d) |
| | The undersigned hereby states that: |
| | each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS. |

VIII. PAYMENT OF FEES (check only one box)

- A. A check in the amount of \$180.00 is enclosed for the above identified fee.
- B.

 Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: July 26, 2005

Gregory A. Stobbs Reg. No. 28,764

Harness, Dickey & Pierce, P.L.C. P.O. Box 828
Bloomfield Hills, Michigan 48303 (248) 641-1600

GAS/sjr



MHDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

| ATTORNEY DOCKET No. | SERIAL NO. | |
|---------------------------|------------|--|
| 5926-000003 | 10/646,541 | |
| APPLICANT | | |
| Bernard A. GALLER, et al. | | |
| FILING DATE | GROUP | |
| August 21, 2003 | 2643 | |

| U.S. PATENT DOCUMENTS | | | | | | |
|-----------------------|------------------------|--------------------|-----------|-----------------------|--------------------|---------------------------------|
| Ref. Desig. | Examiner's Initials | Document Number | Date | Name | Class/ Subclass | (If appropriate) Filing Date |
| 1. | | 5,111,506 | 5/5/1992 | Charpentier, et al. | | |
| 2. | | 6,885,752 | 4/26/2005 | Chabries, et al. | | |
| 3. | | 6,754,355 | 6/22/2004 | Stetzler, et al. | | |
| 4. | | 5,757,932 | 5/26/1998 | Lindemann, et al. | | |
| 5. | | 5,719,528 | 2/17/1998 | Rasmussen, et al. | | |
| 6. | | 5,500,902 | 3/19/1996 | Stockham, Jr., et al. | | |
| 7. | | 5,111,419 | 5/5/1992 | Morely, Jr., et al. | | |

| FORE | IGN PATEN | IT DOCUMENTS | 3 | | | | |
|----------------|------------------------|--------------------|------|---------|--------------------|--------------------|---------|
| Ref. Desig. | Examiner's Initials | Document Number | Date | Country | Class/ Subclass | Translation Yes | ı No |
| 1. | | | | | | | |

| OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) | | | | |
|--|---------------------|--|--|--|
| Ref. Desig. | Examiner's Initials | | | |
| 1. | | ADVANCED IC TECHNOLOGY, "System-on-Chip Solutions for Next-Generation Medical Applications", Fall 2003 | | |
| 2. | | EE TIMES, "Hearing-aid SoC: Tiny Gear, big challenges", March 17, 2004 | | |
| 3. | | IP 2000 Conference 23./24. October 2000, "Low Power Macro Component Library Framework for the Design and Verification of DSP IPs for Hearing Aid Applications", 23./24. October 2000 | | |
| 4. | | 1997 Microchip Technology Inc., Section 26. Watchdog Timer and Sleep Mode | | |
| 5. | | Maxstream, Knowledgebase, "Cyclic Sleep Mode Example" | | |

| Examiner: | Date Considered: |
|-----------|------------------|
| | Date Considered. |

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

| ATTORNEY DOCKET NO. | SERIAL NO. | |
|---------------------------|------------|--|
| 5926-000003 | 10/646,541 | |
| APPLICANT | | |
| Bernard A. GALLER, et al. | | |
| FILING DATE | GROUP | |
| August 21, 2003 | 2643 | |

| OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) | | | |
|--|------------------------|---|--|
| Ref. Desig. | Examiner's Initials | | |
| 6. | | EE Times, "Designing Ultra-Low-Power DSPs", 1/30/2001 | |
| 7. | | AMIS Press Release, April 2005, Phonak selects BelaSigna 200 | |
| 8. | | Sumo hearing aids | |
| 9. | | Texas Instruments, "Digital Hearing Aids: Overview" | |
| 10. | | CSE - Department of Computer Science and Technology, Washington University in St. Louis, "Power Consumption of Digital Hearing Aid Computations Using Customized Numerical Representations" | |

| Examiner: | Date Considered: |
|-----------|------------------|
| | |